217/782-2113

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT/

PERMITTEE

Electric Energy, Inc.

Attention: Manager, Technical Services

2100 Portland Road Post Office Box 165 Joppa, Illinois 62953

Application No.: 95090120 I.D. No.: 127855AAC

Applicant's Designation: Joppa Steam Date Received: September 8, 1995

Operation of: Electric Power Plant

Source Location: 2100 Portland Road, Joppa, Massac County

Responsible Official: Terence H Larbes, Manager, Technical Services

This permit is hereby granted to the above-designated Permittee to OPERATE the Electric Energy, Inc. Joppa Steam Electric Station, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

The current federal Phase II Acid Rain Permit issued to Joppa Steam by the Illinois EPA is incorporated into this CAAPP permit (Refer to Attachment 3).

If you have any questions concerning this permit, please contact Christopher Romaine at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:CRR:psj

cc: Illinois EPA, FOS, Region 3
USEPA

TABLE OF CONTENTS

			PAGE
1.0	SOURCE	IDENTIFICATION	4
	1.1 1.2 1.3 1.4	Source Owner/Parent Company Operator General Source Description Source Status under Title I of the Clean Air Act	
2.0	LIST OF	ABBREVIATIONS AND ACRONYMS USED IN THIS PERMIT	5
3.0	INSIGNI	FICANT ACTIVITIES	6
	3.1 3.2 3.3	Identification of Insignificant Activities Compliance with Applicable Requirements Addition of Insignificant Activities	
4.0	SIGNIFI	CANT EMISSION UNITS AT THIS SOURCE	9
5.0	OVERALL	SOURCE CONDITIONS	10
	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9	Source Description Applicable Regulations Non-Applicability of Regulations of Concern Source-Wide Operational Limitations and Work Practices Source-Wide Emission Limitations General Recordkeeping Requirements General Reporting Requirements General Operational Flexibility General Compliance Procedures	
6.0	TRADING	PROGRAMS	15
	6.1 6.2	NO_{x} Trading Program Acid Rain Program	
7.0	UNIT SP	ECIFIC CONDITIONS	25
	7.1 7.2 7.3	Unit: Coal Fired Boilers Control: Electrostatic Precipitators Unit: Coal Handling Operations Control: Various Measures and Control Devices Unit: Existing Coal Processing Operations Control: Various Measures and Control Devices	
	7.4	Unit: Gasoline Storage Control: Submerged Loading	
	7.5	Unit: Hydrochloric Acid Storage Control: Scrubber	
8.0	GENERAL	PERMIT CONDITIONS	70
	8.1	Permit Shield	
	8.2	Applicability of Title IV Requirements (Acid Deposition Control)	
	8.3	Emissions Trading Programs	

			PAGE		
	8.4	Operational Flexibility/Anticipated Operating Scenarios			
	8.5	Testing Procedures			
	8.6	Reporting Requirements			
	8.7	Obligation to Comply with Title I Requirements			
9.0	STANDARD PERMIT CONDITIONS				
	9.1	Effect of Permit			
	9.2	General Obligations of Permittee			
	9.3	Obligation to Allow Illinois EPA Surveillance			
	9.4	Obligation to Comply With Other Requirements			
	9.5	Liability			
	9.6	Recordkeeping			
	9.7	Annual Emissions Report			
	9.8	Requirements for Compliance Certification			
	9.9	Certification			
	9.10				
		Permanent Shutdown			
	9.12	Reopening and Reissuing Permit for Cause			
	9.13	Severability Clause			
	9.14	Permit Expiration and Renewal			
10.0	ATTACHMENTS				
	10.1	Attachment 1 - Example Certification by a Responsible Official	1-1		
	10.2	Attachment 2 - Guidance	2-1		
	10.3	Attachment 3 - Acid Rain Phase II Permit	3-1		

1.0 SOURCE IDENTIFICATION

1.1 Source

Electric Energy, Inc. 2100 Portland Road Joppa, Illinois 62953 618/543-7531

I.D. No.: 127855AAC

Office of Regulatory Information Systems (ORIS) Code: 887

Standard Industrial Classification Code:
4911 (Electric, Gas, and Sanitary Services - Electric Services)

1.2 Owner/Parent Company

Electric Energy, Inc. 2100 Portland Road Joppa, Illinois 62953

1.3 Operator

Electric Energy, Inc. 2100 Portland Road Joppa, Illinois 62953

Bruce Parker, 618/543-7531

1.4 General Source Description

Electric Energy, Inc. operates six boilers and associated steam turbine generators to produce electricity.

A separate company, Midwest Electric Power, also operates natural gas-fired turbines at this site to produce peaking electric power. Although it is part of this source, its operations are addressed under a separate CAAPP permit, under I.D. No. 1278999AAA.

1.5 Source Status under Title I of the Clean Air Act (CAA)

This permit contains terms and conditions to address the applicability and requirements of regulations promulgated under Title I of the CAA to new and modified emission units constructed at the source. Title I of the CAA establishes regulatory programs, such as the federal program for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, that are implemented through permits for new and modified sources. These "Title I" terms and conditions are identified in this permit as T1, T1R or T1N, depending on whether, respectively, they reflect the requirements of the previous Title I permit, they are revisions to such requirements, or they are newly established. These terms and conditions continue in effect as provided by Condition 8.7 of this permit, notwithstanding the expiration date specified on page 1 of this permit, as their authority derives from Title I, as well as from Title V of the CAA.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

acfm	actual cubic feet per minute			
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]			
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1,			
	Stationary Point and Area Sources, USEPA, Office of Air			
	Quality Planning and Standards, Research Triangle Park			
Btu	British thermal unit			
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]			
CAAPP	Clean Air Act Permit Program			
CAM	Compliance Assurance Monitoring			
CFR	Code of Federal Regulations			
CO	Carbon Monoxide			
EGU	Electrical Generating Unit			
ESP	electrostatic precipitator			
°F	degrees Fahrenheit			
ft	foot			
ft ³	cubic foot			
HAP	Hazardous Air Pollutant(s)			
hr	hour			
IAC	Illinois Administrative Code			
I.D. No.	Illinois EPA Identification Number of Source			
Illinois EPA	Illinois Environmental Protection Agency			
°K	degrees Kelvin			
Kg	kilogram			
KW	kilowatt			
lb	pound			
m	meter			
Mg	megagram			
mmBtu	million British thermal units			
MW	megawatt			
NO _x	Nitrogen Oxides			
NSPS	New Source Performance Standards			
NSSA	New Source Set-Aside			
OM	Organic Material			
PM	Particulate Matter			
PM ₁₀	Particulate Matter with an aerodynamic diameter less			
	than or equal to a nominal 10 microns as measured by			
	applicable test or monitoring methods			
ppm	parts per million			
PSD	Prevention of Significant Deterioration, 40 CFR 52.21			
psia	pounds per square inch absolute			
SO ₂	Sulfur Dioxide			
t	ton			
USEPA	United States Environmental Protection Agency			
VOC or VOM	Volatile Organic Compounds or Volatile Organic Material			
VOL	Volatile Organic Liquid			
yr	year			

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Two hydrazine systems used for the dilution and feeding of hydrazine solution to the boilers, each with a total capacity of less than 1,000 gallons. (Each system includes a number of small tanks.)

3.1.2 Activities that are insignificant activities based upon maximum emissions of regulated air pollutants in the absence of air pollution control equipment, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Sulfuric acid storage tanks

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:
 - a. Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (a) units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane or liquefied petroleum gas, (b) units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with natural gas, propane or liquefied petroleum gas, and (c) units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood;
 - b. Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons that are not used to store gasoline or any HAP;
 - c. Storage tanks of virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuels;
 - d. Gas turbines and stationary reciprocating internal combustion engines of between 112 KW and 1,118 KW (150 and 1,500 horsepower) power output that are emergency or standby units; and
 - e. Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous

caustic solutions that do not have an organic solvent mixed with such materials.

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

Note: The heating of a boiler with auxiliary fuel burners during maintenance and repair of the boiler is addressed as an insignificant activity under 35 IAC 201.210(b)(xxix) and accordingly is not addressed in the unit-specific conditions of this permit for boilers.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.3 Addition of Insignificant Activities
 - 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
 - 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Unit	Equipment Identification	Description	Emission Control
1	Boiler 1	Boiler Equipped With Low-NO _x Burners, Capable of Firing Coal, a Combination of Coal and Natural Gas, or Natural Gas Only	Electrostatic Precipitator (ESP-1)
	Boiler 2	Boiler Equipped With Low-NO _x Burners, Capable of Firing Coal, a Combination of Coal and Natural Gas, or Natural Gas Only	Electrostatic Precipitator (ESP-2)
	Boiler 3	Boiler Equipped With Low-NO _x Burners, Capable of Firing Coal, a Combination of Coal and Natural Gas, or Natural Gas Only	Electrostatic Precipitator (ESP-3)
	Boiler 4	Boiler Equipped With Low-NO _x Burners, Capable of Firing Coal Only, a Combination of Coal and Natural Gas, or Natural Gas Only	Electrostatic Precipitator (ESP-4)
	Boiler 5	Boiler Equipped With Low-NO _x Burners, Capable of Firing Coal, a Combination of Coal and Natural Gas, or Natural Gas Only	Electrostatic Precipitator (ESP-5)
	Boiler 6	Boiler Equipped With Low-NO _x Burners, Capable of Firing Coal, a Combination of Coal and Natural Gas, or Natural Gas Only	Electrostatic Precipitator (ESP-6)
2	Truck, Rail and Barge Coal Receiving, Conveyor Belts, and Coal Storage	Coal Handling Operations Including Transfer Points and Storage	Enclosure, Covers, Dust Suppressant, and Dust Collectors
3	Crushers and Grizzlies	Coal Processing Operations	Enclosure, Dust Suppressant, and Dust Collectors
4	Gasoline Storage	Small Underground Storage Tank	Permanent Submerged Loading Pipe
5	Hydrochloric Acid Storage	Small Storage Tank	Scrubber

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO_2 , NO_x , PM, PM_{10} , and VOM emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit as a major source of HAPs.
- 5.1.3 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for purposes of Acid Deposition Control, Title IV of the Clean Air Act.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability.

 Appropriate compliance procedures addressing these regulations are set for specific emission units in Section 7 of this permit:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- 5.2.3 The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:
 - Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with

the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Episode Action Plan

- a. Pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If an operational change occurs at the source that invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plan shall be further revised if disapproved by the Illinois EPA.

5.2.5 Compliance Assurance Monitoring (CAM) Plan

This stationary source has pollutant-specific emissions units, i.e., boilers 1 through 6 for particulate matter, that are subject to 40 CFR Part 64, Compliance Assurance Monitoring for Major Stationary Sources. The Permittee must submit a Compliance Assurance Monitoring (CAM) plan for each affected pollutant-specific emissions unit upon application for renewal of this permit or upon a request for significant modification to this permit that applies to these units. [Section 39.5(7)(a) of the Act]

5.2.6 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the Chemical Accident Prevention Provisions in 40 CFR Part 68, then the owner or operator shall submit:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by Condition 9.8.

Note: This condition is imposed in this permit pursuant to 40 CFR 68.215 (a).

- 5.2.7 Future Emission Standards for Hazardous Air Pollutants
 - a. Should this stationary source become subject to a regulation under 40 CFR Parts 63 after the date issued of this permit, then the Permittee shall, in accordance with such regulation, comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification required by Condition 9.8.

Note: This permit may also have to be revised or reopened to address such new regulations. (See Condition 9.12.2.)

- b. No later than upon the submittal for renewal of this permit, the Permittee shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation that was promulgated after the date issued of this permit.
- 5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

- 5.5 Source-Wide Emission Limitations
 - 5.5.1 Permitted Emissions for Fees

Emission limitations are not being set for this source for the purpose of permit fees since the Permittee did not propose restrictions on its permitted emissions in its CAAPP application. The Permittee is required to pay the maximum fee in accordance with Section 39.5(18)(a) of the Act, which is currently \$250,000 per year.

5.5.2 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, or Section 502(b)(10) of the CAA.

5.6 General Source-Wide Recordkeeping Requirements

5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report including the following items, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of annual emissions from the emission units that are covered by Section 7 (Unit Specific Conditions) of this permit, including emissions of mercury, hydrogen chloride, and hydrogen fluoride.
- b. i. For purposes of estimating mercury emissions from the source, the mercury content of coal burned in boilers shall be based on the data collected by USEPA in its Information Collection Request (ICR) pursuant to Section 112 of the Clean Air Act.
 - ii. If such data above is not available for a coal that is burned in a boiler, the Permittee shall collect representative data on the elemental composition of the coal, including mercury, similar to the ICR data collected by USEPA.

5.6.2 Retention and Availability of Records

- a. All records required by this permit, including logs, plans, procedures, or instructions required to be kept by this permit, shall (unless a longer retention period is specified by the particular recordkeeping provision herein) be retained for at least five years from the date of entry or the date that the log, plan, procedure or instruction is replaced by new material, shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records required to be retained that are kept in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous

calendar year, including information for emissions of mercury, hydrogen chloride, hydrogen fluoride, and other hazardous air pollutants, as specified by 35 IAC Part 254.

5.7.2 General Provisions for Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. For emissions units that are addressed by the unitspecific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.
- b. i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation reports.
 - ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.
- 5.8 General Operational Flexibility/Anticipated Operating Scenarios

None

5.9 General Compliance Procedures

None

6.0 TRADING PROGRAMS

6.1 NO_x Trading Program

6.1.1 Description of NO_x Trading Program

The NO_x Trading Program is a regional "cap and trade" market system for large sources of NO_x emissions in the eastern United States, including Illinois. It is designed to reduce and maintain NO_x emissions from the emission units covered by the program within a budget to help contribute to attainment and maintenance of the ozone ambient air quality standard in the multi-state region covered by the program, as required by Section 126 of the CAA. The NO_x Trading Program applies in addition to other applicable requirements for NO_x emissions and in no way relaxes these other requirements.

Electrical generating units (EGU) that are subject to the $\rm NO_x$ Trading Program are referred to as "budget EGU." Sources that have one or more EGU or other units subject to the $\rm NO_x$ Trading Program are referred to as budget sources.

The NO_x Trading Program controls NO_x emissions from budget EGU and other budget units during a seasonal control period from May 1 through September 30 of each year, when weather conditions are conducive to formation of ozone in the ambient air. (In 2004, the first year that the NO_x Trading Program is in effect, the control period will be May 31 through September 30.) By November 30 of each year, the allowance transfer deadline, each budget source must hold "NO $_{\rm x}$ allowances" for the actual NO $_{\rm x}$ emissions of its budget units during the preceding control period. USEPA will then retire NO_{x} allowances in the source's accounts in amounts equivalent to its seasonal emissions. If a source does not have sufficient allowances in its accounts, USEPA would subtract allowances from the source's future allocation for the next control period and impose other penalties as appropriate. Stringent monitoring procedures developed by USEPA apply to budget units to assure that NO_x emissions are accurately determined.

The number of NO_x allowances available for budget sources is set by the overall budget for NO_x emissions established by USEPA. This budget requires a substantial reduction in NO_x emissions from historical levels as necessary to meet air quality goals. In Illinois, existing budget sources initially receive their allocation or share of the NO_x allowances budgeted for EGU in an amount determined by rule [35 IAC Part 217, Appendix F]. Between 2007 and 2011, the allocation mechanism for existing EGU gradually shifts to one based on the actual utilization of EGU in preceding control periods. New budget EGU, for which limited utilization data may be available, may obtain NO_x

allowances from the new source set-aside (NSSA), a portion of the overall budget reserved for new EGU.

In addition to directly receiving or purchasing NO_x allowances as described above, budget sources may transfer NO_x allowances from one of their units to another. They may also purchase allowances in the marketplace from other sources that are willing to sell some of the allowances that they have received. Each budget source must designate an account representative to handle all its allowance transactions. The USEPA, in a central national system, will maintain allowance accounts and record transfer of allowances among accounts.

The ability of sources to transfer allowances will serve to minimize the costs of reducing $N{\rm O}_x$ emissions from budget units to comply with the overall $N{\rm O}_x$ budget. In particular, the $N{\rm O}_x$ emissions of budget units that may be most economically controlled will be targeted by sources for further control of emissions. This will result in a surplus of $N{\rm O}_x$ allowances from those units that can be transferred to other units at which it is more difficult to control $N{\rm O}_x$ emissions. Experience with reduction of $S{\rm O}_2$ emissions under the federal Acid Rain program has shown that this type of trading program not only achieves regional emission reductions in a more cost-effective manner but also results in greater overall reductions than application of traditional emission standards to individual emission units.

The USEPA developed the plan for the $\mathrm{NO_x}$ Trading Program with assistance from affected states. Illinois' rules for the $\mathrm{NO_x}$ Trading Program for EGU are located in 35 IAC Part 217, Subpart W and have been approved by the USEPA. These rules provide for interstate trading, as mandated by Section 9.9 of the Act. Accordingly, these rules refer to and rely upon federal rules at 40 CFR Part 96, which have been developed by USEPA for certain aspects of the $\mathrm{NO_x}$ Trading Program, and which an individual state must follow to allow for interstate trading of $\mathrm{NO_x}$ allowances.

Note: This narrative description of the NO_{x} Trading Program is for informational purposes only and is not enforceable.

6.1.2 Applicability

a. The following emission units at this source are budget EGU for purposes of the NO_x Trading Program. Accordingly, this source is a budget source and the Permittee is the owner or operator of a budget source and budget EGU. In this section of the permit, these emission units are addressed as budget EGU.

Boilers 1 through 6 (Joppa 1 through 6)

b. This permit does not provide "low-emitter status" for the above emission units, pursuant to 35 IAC 217.754(c).

6.1.3 General Provisions of the NO_x Trading Program

- a. This source and the budget EGU at this source shall comply with all applicable requirements of Illinois' NO_x Trading Program, i.e., 35 IAC Part 217, Subpart W, and 40 CFR Part 96 (excluding 40 CFR 96.4(b) and 96.55(c), and excluding 40 CFR 96, Subparts C, E and I), pursuant to 35 IAC 217.756(a) and 217.756(f)(2).
- b. Any provision of the NO_x Trading Program that applies to a budget source (including any provision applicable to the account representative of a budget source) shall also apply to the owner or operator of such budget sources and to the owner and operator of each budget EGU at the source, pursuant to 35 IAC 217.756(f)(3).
- c. Any provision of the $\mathrm{NO_x}$ Trading Program that applies to a budget EGU (including any provision applicable to the account representative of a budget EGU) shall also apply to the owner and operator of such budget EGU. Except with regard to requirements applicable to budget EGUs with a common stack under 40 CFR 96, Subpart H, the owner and operator and the account representative of one budget EGU shall not be liable for any violation by any other budget EGU of which they are not an owner or operator or the account representative, pursuant to 35 IAC 217.756(f)(4).

6.1.4 Requirements for NO_x Allowances

- Beginning in 2004, by November 30 of each year, the allowance transfer deadline, the account representative of each budget EGU at this source shall hold allowances available for compliance deduction under 40 CFR 96.54 in the budget EGU's compliance account or the source's overdraft account in an amount that shall not be less than the budget EGU's total tons of NO_x emissions for the preceding control period, rounded to the nearest whole ton, as determined in accordance with 40 CFR 96, Subpart H, plus any number necessary to account for actual utilization (e.g., for testing, start-up, malfunction, and shut down under 40 CFR 96.42(e) for the control period, pursuant to 35 IAC 217.756(d)(1). For purposes of this requirement, an allowance may not be utilized for a control period in a year prior to the year for which the allowance is allocated, pursuant to 35 IAC 217.756(d)(5).
- b. The account representative of a budget EGU that has excess emissions in any control period, i.e., NO_x emissions in excess of the number of NO_x allowances

held as provided above, shall surrender the allowances as required for deduction under 40 CFR 96.54(d)(1), pursuant to 35 IAC 217.756(f)(5). In addition, the owner or operator of a budget EGU that has excess emissions shall pay any fine, penalty, or assessment, or comply with any other remedy imposed under 40 CFR 96.54(d)(3) and the Act, pursuant to 35 IAC 217.756(f)(6). Each ton of NO $_{\rm x}$ emitted in excess of the number of NO $_{\rm x}$ allowances held as provided above for each budget EGU for each control period shall constitute a separate violation of 35 IAC Part 217 and the Act, pursuant to 35 IAC 217.756(d)(2).

An allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program is a limited authorization to emit one ton of NO_x in accordance with the NO_{x} Trading Program. As explained by 35 IAC 217.756(d)(6), no provision of the NO_x Trading Program, the budget permit application, the budget permit, or a retired unit exemption under 40 CFR 96.5 and no provision of law shall be construed to limit the authority of the United States or the State of Illinois to terminate or limit this authorization. As further explained by 35 IAC 217.765(d)(7), an allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program does not constitute a property right. As provided by 35 IAC 217.756(c)(4), allowances shall be held, deducted from, or transferred among allowance accounts in accordance with 35 IAC Part 217, Subpart W, and 40 CFR 96, Subparts F and G.

6.1.5 Monitoring Requirements for Budget EGU

- a. The Permittee shall comply with the monitoring requirements of 40 CFR Part 96, Subpart H, for each budget EGU and the compliance of each budget EGU with the emission limitation under Condition 6.1.4(a) shall be determined by the emission measurements recorded and reported in accordance with 40 CFR 96, Subpart H, pursuant to 35 IAC 217.756(c)(1), (c)(2) and (d)(3).
- b. The account representative for the source and each budget EGU at the source shall comply with those sections of the monitoring requirements of 40 CFR 96, Subpart H, applicable to an account representative, pursuant to 35 IAC 217.756(c)(1) and (d)(3).

Note: Pursuant to 40 CFR 96.70(b), existing budget EGU are to begin complying with applicable monitoring requirements of 40 CFR Part 96 at least one year in advance of the start of the first control period governed by the NO_{\times} Trading Program.

6.1.6 Recordkeeping Requirements for Budget EGU

Unless otherwise provided below, the Permittee shall keep on site at the source each of the following documents for a period of at least 5 years from the date the document is created. This 5-year period may be extended for cause at any time prior to the end of the 5 years, in writing by the Illinois EPA or the USEPA.

- a. The account certificate of representation of the account representative for the source and each budget EGU at the source and all documents that demonstrate the truth of the statements in account certificate of representation, in accordance with 40 CFR 96.13, as provided by 35 IAC 217.756(e)(1)(A). These certificates and documents must be retained on site at the source for at least 5-years after they are superseded because of the submission of a new account certificate of representation changing the account representative.
- b. All emissions monitoring information, in accordance with 40 CFR 96, Subpart H, (provided that to the extent that 40 CFR 96, Subpart H, provides for a 3-year period for retaining records, the 3-year period shall apply,) pursuant to 35 IAC 217.756(e)(1)(B).
- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Trading Program or documents necessary to demonstrate compliance with requirements of the NO_x Trading Program, pursuant to 35 IAC 217.756(e)(1)(C).
- d. Copies of all documents used to complete a budget permit application and any other submission under the NO_x Trading Program, pursuant to 35 IAC 217.756(e)(1)(D).

6.1.7 Reporting Requirements for Budget EGU

- a. The account representative for this source and each budget EGU at this source shall submit to the Illinois EPA and USEPA the reports and compliance certifications required under the NO_x Trading Program, including those under 40 CFR 96, Subparts D and H and 35 IAC 217.774, pursuant to 35 IAC 217.756(e)(2).
- b. Notwithstanding the provisions in Conditions 9.8 and 9.9 of this CAAPP permit, these submittals need only be signed by the designated representative, who may serve in place of the responsible official for this purpose as provided by the Section 39.5(1) of the Act, and submittals to the Illinois EPA need only be made to the Illinois EPA, Air Compliance Section.

6.1.8 Allocation of NO_x Allowances to Budget EGU

- a. As the budget EGU identified in Condition 6.1.2(a) are "existing" EGU listed in 35 IAC Part 217, Appendix F, these EGU are entitled to NO_{x} allowances as follows. (The portion of Appendix F that applies to the Permittee is provided in Condition 6.1.12). The number of NO_{x} allowances actually allocated for these budget EGU shall be the number of NO_{x} allowances issued by USEPA pursuant to the allocation information reported to it by the Illinois EPA, which information may reflect adjustments to the overall allocations to all budget EGU as provided for by 35 IAC 217.760(b) and (c):
 - i. In 2004 through 2006 (the first three years of the NO_x Trading Program), an annual allocation of NO_x allowances as specified by 35 IAC 217.764(a)(1), (i.e., the number of NO_x allowances listed in Appendix F, Column 7), and as provided by 35 IAC 217.768(j), a prorata share of any NO_x allowances remaining in the new source set-aside (NSSA) following the allocation of allowances to new budget EGU.
 - ii. In 2007, as provided by 35 IAC 217.764(b), an allocation of NO_x allowances as specified by 35 IAC 217.764(b)(1), (i.e., the number of NO_x allowances listed in Appendix F, Column 8), and as provided by 35 IAC 217.764(b)(4), a pro-rata share of any NO_x allowances remaining after the allocation of allowances pursuant to 35 IAC 217.764(b)(2) to other budget EGU that commence operation between January 1, 1995 and April 30, 2003.
 - iii. In 2008, as provided by 35 IAC 217.764(c), a specified allocation of NO_x allowances, (i.e., the number of NO_x allowances listed in Appendix F, Column 8), and a pro-rata share of any NO_x allowances remaining after the allocation of allowances to other budget EGU that commence operation between January 1, 1995 and April 30, 2004.
 - iv. In 2009, as provided by 35 IAC 217.764(d), a specified allocation of NO_x allowances, ((i.e., the number of NO_x allowances listed in Appendix F, Column 9), and a pro-rata share of any NO_x allowances remaining after the allocation of NO_x allowances to other budget EGU that commence operation between January 1, 1995 and April 30, 2005, and as provided by 35 IAC 217.764(d)(6), a pro-rata share of any surplus of NO_x allowances in the NSSA after the allocation of NO_x allowances to new budget EGU pursuant to 35 IAC 217.764(d)(5).

- v. In 2010, as provided by 35 IAC 217.764(e), a specified allocation of NO_x allowances, (i.e., the number of NO_x allowances listed in Appendix F, Column 9), and a pro-rata share of any NO_x allowances remaining after the allocation of NO_x allowances to other budget EGU that commence operation between January 1, 1995 and April 30, 2006, and a pro-rata share of any surplus of NO_x allowances in the NSSA following the allocation of NO_x allowances to new budget EGU.
- vi. In 2011 and annually thereafter, as provided by 35 IAC 217.764(e), an allocation of NO_x allowances based on the prior operation of these budget EGU during previous control periods and a pro-rata share of any surplus of NO_x allowances in the NSSA following the allocation of NO_x allowances to new budget EGU.

Note: If the start of the $\mathrm{NO_x}$ Trading program is shifted because of a Court Decision, the years defining the different control periods would be considered to be adjusted accordingly, as provided by the Board note following 35 IAC 217.764.

- b. In accordance with 35 IAC 217.762, the theoretical number of NO_x allowances for these budget EGU listed in Condition 6.1.2(a), calculated as the product of the applicable NO_x emissions rate and heat input as follows, shall be the basis for determining the prorata share of NO_x allowances for these budget EGU and the allocation of NO_x allowances to these budget EGU based on their prior operation:
 - i. The applicable NO_x emission rate for these budget EGU shall be 0.15 lb/mmBtu, as specified by 35 IAC 217.762(a)(1),
 - ii. The applicable heat input (mmBtu/control period) shall be the average of the two highest heat inputs from the control periods four to six years prior to the year for which the allocation is being made, as provided by 35 IAC 217.762(b)(1).
- 6.1.9 Eligibility for NO_{x} Allowances from the New Source Set-Aside (NSSA)

The Permittee is not eligible to obtain NO_x allowances for the budget EGU identified in Condition 6.1.2(a) from the NSSA, as provided by 35 IAC 217.768, because the budget EGU are "existing" budget EGU.

6.1.10 Eligibility for Early Reduction Credits

The Permittee is eligible to request NO_x allowances for the budget EGU identified in Condition 6.1.2(a) for any early reductions in NO_x emissions, as provided by 35 IAC 217.770.

- 6.1.11 Budget Permit Required by the NO_x Trading Program
 - a. For this source, this Section of the CAAPP Permit, i.e., Section 6.1, is the Budget Permit required by the NO_x Trading Program and is intended to contain federally enforceable conditions addressing all applicable NO_x Trading Program requirements. This Budget Permit shall be treated as a complete and segregable portion of the source's entire CAAPP permit, as provided by 35 IAC 217.758(a)(2).
 - b. The Permittee and any other owner or operator of this source and each budget EGU at the source shall operate the budget EGU in compliance with this Budget Permit, pursuant to 35 IAC 217.756(b)(2).
 - c. No provision of this Budget Permit or the associated application shall be construed as exempting or excluding the Permittee, or other owner or operator and, to the extent applicable, the account representative of a budget source or budget EGU from compliance with any other regulation or requirement promulgated under the CAA, the Act, the approved State Implementation Plan, or other federally enforceable permit, pursuant to 35 IAC 217.756(g).
 - d. Upon recordation by USEPA, under 40 CFR 96, Subparts F or G, or 35 IAC 217.782, every allocation, transfer, or deduction of an allowance to or from the budget EGU's compliance accounts or to or from the overdraft account for the budget source is deemed to amend automatically, and become part of, this budget permit, pursuant to 35 IAC 217.756(d)(8). This automatic amendment of this budget permit shall be deemed an operation of law and will not require any further review.
 - e. No revision of this Budget Permit shall excuse any violation of the requirements of the NO_x Trading Program that occurs prior to the date that the revisions to this permit takes effect, pursuant to 35 IAC 217.756(f)(1).
 - f. The Permittee, or other owner or operator of the source, shall reapply for a Budget Permit for the source as required by 35 IAC Part 217, Subpart W and Section 39.5 of the Act. For purposes of the NO_x Trading Program, the application shall contain the information specified by 35 IAC 217.758(b)(2).

6.1.12 References

35 IAC Part 217 Appendix F (Provisions Applicable to the Permittee)

				80% of NO_x	50% of NO_x	2004,		
Company/	Generating		${ m NO}_{ m x}$ Budget	Budget	Budget	2005, 2006	2007, 2008	2009, 2010
I.D. No.	Unit	EGU	Allowances	Allowances	Allowances	Allowances	Allowances	Allowances
1	2	3	4	5	6	7	8	9
Company Totals			No NSSA	No NSSA	No NSSA	5% NSSA	2% NSSA	2% NSSA
127855AAC	Joppa 1	Joppa 1	481	385	241	457	377	236
"	Joppa 2	Joppa 2	515	412	258	489	404	252
"	Joppa 3	Joppa 3	513	410	257	487	402	251
"	Joppa 4	Joppa 4	384	307	192	365	301	188
"	Joppa 5	Joppa 5	463	370	232	440	363	227
"	Joppa 6	Joppa 6	524	419	262	498	411	257
Electric Energy Inc. Totals			2,880	2,304	1,440	2,736	2,258	1,411

6.2 Acid Rain Requirements

6.2.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Boilers 1 through 6

Note: Title IV of the CAA, and other laws and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

6.2.2 Applicable Emission Requirements

The owners and operators of the source shall not violate applicable Title IV provisions. In particular, NO_{x} emissions of affected units shall not exceed the limit set by 40 CFR Part 76, which currently is 0.45 lb NO_{x} per million Btu heat input with the ability for averaging among units as allowed by an Acid Rain Permit. SO_2 emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions. [Section 39.5(7)(g) and (17)(l) of the Act]

Note: Affected sources must hold SO_2 allowances to account for the SO_2 emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO_2 emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.2.3 Monitoring, Recordkeeping and Reporting

The owners and operators of the source and, to the extent applicable, their designated representative, shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75. [Section 39.5(7)(b) and 17(m) of the Act]

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

 NO_x : Continuous emissions monitoring (40 CFR 75.12) SO_2 : Continuous emissions monitoring (40 CFR 75.11) Opacity: Continuous emission monitoring (40 CFR 75.14) CO_2 : Continuous monitoring for carbon dioxide (40 CFR Part 75, Appendix G)

6.2.4 Acid Rain Permit

The owners and operators of the source shall comply with the terms and conditions of the source's Acid Rain permit. [Section 39.5(17)(1) of the Act]

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 10.2 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13)(e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.2.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions. In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan. [Section 39.5(17)(h) of the Act]
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements. [Section 39.5(7)(h) of the Act]

7.0 UNIT SPECIFIC CONDITIONS

7.1 <u>Unit 1 - Coal Fired Boilers</u> Electrostatic Precipitators

7.1.1 Descriptions

The Permittee operates coal-fired boilers for electric generation. The boilers are currently operated for base load generation, normally operating for weeks at a time between startups. The boilers, which were built in the 1950's, are identical in size and type, with a nominal capacity of 1800 mmBtu/hour each and pairs of boilers served by a single stack. In addition to coal, these boilers fire natural gas or fuel oil during startup and for flame stabilization. Periodically small amounts of used oil or boiler cleaning residue are fired with the coal in these units. Particulate matter (PM) emissions from the boilers are controlled by electrostatic precipitators, which were installed pursuant to Construction Permit FC70019, issued in 1970. Nitrogen oxide (NO_x) emissions from firing coal (solid fuel) are controlled with low- NO_x burners, which were installed in the mid 1990s pursuant to Construction Permits 93030068, 94020004, 92090019, 93010010, 94100021, and 94060047. These boilers also have the capability to fire a combination of coal and natural gas (Mode 2) and only natural gas (Mode 3) as their principle fuel.

7.1.2 List of Emission Equipment and Pollution Control Equipment

These unit-specific conditions address the following emission units:

Boiler		Emission Control	
Name	Description	Equipment	Stack
Boiler 1	Combustion Engineering #16665 Field Constructed 1953	Electrostatic Precipitator	S1
Boiler 2	Combustion Engineering #16667 Field Constructed 1953	Electrostatic Precipitator	S1
Boiler 3	Combustion Engineering #16663 Field Constructed 1954	Electrostatic Precipitator	S2
Boiler 4	Combustion Engineering #16661 Field Constructed 1954	Electrostatic Precipitator	S2
Boiler 5	Combustion Engineering #17415 Field Constructed 1955	Electrostatic Precipitator	S3
Boiler 6	Combustion Engineering #17413 Field Constructed 1955	Electrostatic Precipitator	S3

7.1.3 Applicability Provisions

a. An "affected boiler" for the purpose of these unitspecific conditions, is a boiler, as listed in Condition 7.1.2 above, that has a capacity in excess of 250 mmBtu/hr that has the capability to fire coal, as well as other fuel materials, for which construction commenced prior to August 17, 1971.

b. Startup Provisions

The Permittee is authorized to operate an affected boiler in violation of the applicable limit of Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(a) (35 IAC 212.203), and Condition 7.1.4(d) (35 IAC 216.121) during startup subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262, as the Permittee "... has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual startups and frequency of startups.":

- i. This authorization only extends for a period of up to 24 hours following initial firing of fuel for each startup event. As provided by 35 IAC 201.265, this authorization does not shield the Permittee from enforcement for any such violation and shall only constitute a prima facie defense to such an enforcement action.
- ii. The Permittee shall conduct startup of affected boilers in accordance with the manufacturers' written instructions or other written instructions prepared by the Permittee and maintained on site that are specifically developed to minimize excess emissions from startups and that include, at a minimum, the following measures:
 - A. Review of the operational condition of an affected boiler prior to initiating startup of the boiler;
 - B. Use of natural gas or oil burners as needed to heat the boiler prior to initiating burning of coal;
 - C. Review of the operating parameters of an affected boiler during each startup as necessary to make appropriate adjustments to the startup to reduce or eliminate excess emissions; and
 - D. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping requirements of Condition 7.1.9(e).

c. Malfunction and Breakdown Provisions

The Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirement of Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(a) (35 IAC 212.203), and Condition 7.1.4(d) (35 IAC 216.121) in the event of a malfunction or breakdown of an affected boiler, including the coal pulverizer, the ash removal system, or the electrostatic precipitator (including flue gas conditioning) subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262 as the Permittee has submitted "... proof that continued operation is required to provide essential service, prevent risk of injury to personnel or severe damage to equipment.":

i. This authorization only allows such continued operation as necessary to provide essential service, prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee. As provided by 35 IAC 201.265, this authorization does not shield the Permittee from enforcement for any such violation and shall only constitute a prima facie defense to such an enforcement action.

;

Upon occurrence of excess emissions due to ii. malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler or remove the affected boiler from service so that excess emissions cease. Unless the Permittee obtains an extension from the Illinois EPA, this shall be accomplished within 24 hours* or noon of the Illinois EPA's next business day*, whichever is later. The Permittee may obtain an extension for up to a total of 72 hours* from the Illinois EPA, Air Regional Office. The Illinois EPA, Air Compliance Section, in Springfield, may grant a longer extension if the Permitee demonstrates that extraordinary circumstances exist, the affected boiler cannot reasonably be repaired or removed from service within the allowed time, it will repair the affected boiler or remove the boiler from service as soon as practicable; and it is taking all reasonable steps to minimize excess emissions, based on the actions that have been and will be taken.

* For this purpose and other related provisions, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall

not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.1.9(f) and 7.1.10(b).
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permitee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

7.1.4 Applicable Emission Standards

- The emissions of PM from each affected boiler shall not exceed 0.19 lb/mmBtu of actual heat input, pursuant to 35 IAC 212.203. This standard applies because affected boilers qualify for the alternative standard provided by this rule, as recognized by the Illinois Pollution Control Board in Regulatory Proceeding R82-1. In particular, in accordance with 35 IAC 212.203(a), as of April 14, 1972, the affected boilers had hourly emission rates based on the stricter of the original design or equipment performance test conditions that were less than 0.20 lb/mmBtu of actual heat input, i.e., 0.14 lb/mmBtu. Thereafter, under this rule, the emission rates are not allowed to degrade by more than 0.05 lb/mmBtu from the base emission rate, resulting in an emission standard of 0.19 lb/mmBtu.
- b. The total emissions of SO₂ from affected boilers shall not exceed 36,865 lb/hour, pursuant to 35 IAC 214.182 and 214.184. These are the SO₂ emissions allowed by the following formula in 35 IAC 214.184, as selected by the Permittee, which when applied to the boilers at the source results in a total allowable SO₂ emission rate of 36,865 lb/hr:

 $E = 0.2222H^2$

Where

- E = total emissions of SO₂, in pounds per hour, from all fuel combustion emission units owned or operated by such person and located within 1 mile from the center point of any such unit*;
- $H = P_1H_1 + P_2H_2 + ... P_nH_n$ and

- $P_{\text{i, i=1, 2, ..., n}}$ = Percentage of total emissions E emitted from emission unit i divided by 100* (Note: P_1 + P_2 ... P_n = 1)
- H_{i} , i = 1, 2, ..., n = Height in feet above grade of stack i. (Note: the height used may not exceed the good engineering practice [GEP] height for such stack**)
- * The six affected boilers represent all the fuel combustion emission units at this source and have identical heat input capacity, so that for the purpose of calculating the allowable SO₂ emission rate, as shown above, it is assumed that each boiler emits 1/6 of the source's total emissions.
- ** The actual height of the stacks for the affected boilers is 550 ft, but the GEP height is 407.33 ft.
- c. The affected boilers are subject to the opacity standard in Condition 5.2.2(b) [35 IAC 212.123(a)], as further modified by 35 IAC 212.123(b) which allows opacity of emissions from an affected boiler to be greater than 30 percent but not greater than 60 percent for a period or periods aggregating no more than 8 minutes in any 60 minute period provided that such opaque emissions shall occur from only one affected boiler during any 60 minute period and such opaque emissions shall be limited to 3 times in any 24 hour period for each affected boiler.
- d. The affected boilers are subject to 35 IAC 216.121, which provides that no person shall cause or allow the emissions of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- e. The affected boilers are subject to a NO_X emission standard pursuant to Section 407 of the Clean Air Act and 40 CFR Part 76, as addressed in Condition 6.2.2 and Section 6.2 of this permit.
- f. Beginning May 1, 2003, the Permittee became subject to additional requirements related to NO_x emissions from the affected boilers pursuant to 35 IAC Part 217, Subpart V, as set forth in Condition 7.1.13.
- 7.1.5 Non-Applicability of Regulations of Possible Concern
 - a. i. The Permittee is shielded from the following rules for each affected boiler when the boiler

is using solid fuel (coal) as its principle fuel:

- A. Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972, Using Solid Fuel Exclusively Located Outside the Chicago Area (PM), 35 IAC 212.202, because affected boilers qualify for the alternative limit pursuant to 35 IAC 212.203 (See Condition 7.1.4(a)).
- B. Combination of Fuels (SO2), 35 IAC 214.162, because the affected boilers are subject to 35 IAC 214.184 (Condition 7.1.4(b)). Compliance with 35 IAC 214.162 is inherent as a practical matter from compliance with Condition 7.1.4(b).
- ii. If an affected boiler is not using solid fuel (coal) as its principle fuel, but is using a combination of coal and natural gas (Mode 2) or natural gas (Mode 3), the affected boiler shall comply with the requirements of the following conditions. During such periods, Condition 7.1.5(c)(ii)(A), below, (which addresses PM) shall substitute for Condition 7.1.4(a) and Condition 7.1.5(c)(ii)(B), below, (which addresses SO2) shall supplement Condition 7.1.4(b), as Conditions 7.1.4(a) and (b) are present elsewhere in this permit:
 - A. The emissions of PM from the affected boiler in any one hour period shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 212.207, i.e., 0.1 lb/mmBtu, as specified by 35 IAC 212.202 and 212.206, multiplied by the hourly heat input from solid fuel (coal) and oil, in mmBtu.
 - B. The emissions of SO2 from the affected boiler in any one hour period shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 214.162, i.e., 6.0 1.0, and 0.3 lb/mmBtu, as specified by 35 IAC 214.186 and 214.161, respectively, multiplied by the hourly heat input, in mmBtu, from solid fuel (coal), residual oil, and distillate oil, respectively.
- iii. For the purpose of the above conditions, an affected boiler shall be considered to be using solid fuel (coal) as its principle fuel (Mode 1) if natural gas and fuel oil are only used in incidental amounts for specific purposes, such as startup, opacity reduction

emission mitigation, flame stabilization, outage of a coal pulverizer, or other temporary interruption in solid fuel supply, as associated with routine firing of solid fuel. A boiler shall not be considered to be using solid fuel as its principle fuel if natural gas and fuel oil are used in more than incidental amounts along with solid fuel (Mode 2) or solid fuel (coal) is burned in at most incidental amounts (Mode 3).

- iv. The Permittee shall notify the Illinois EPA if the status of an affected boiler changes among Modes 1, 2, or 3. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.
- 7.1.6 Work Practices, Operational and Production Limits and Emission Limitations

The NO_x emissions from the affected boilers shall not exceed 11,506 tons per year and the NO_x emissions from affected Boiler 5 shall not exceed 2,976 tons per year. Compliance with these limitations shall be determined from a running total of 12 months of data. (T1)

These limitations were established in Construction Permit 99100060 issued to Midwest Electric Power for installation of natural gas fired combustion turbines at the source.

7.1.7 Testing Requirements

Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall measure the PM and CO emissions of each affected boiler as specified below:

- a. i. PM emission measurements shall be made under the following circumstances:
 - A. Prior to April 1, 2006.
 - B. Within 90 days of operating an affected boiler for more than 24 hours total in a calendar quarter at a load* that is more than 2 percent higher than the greatest load on any individual boiler, during the most recent set of PM tests on the affected boilers in which compliance is shown (refer to Condition 7.1.7(e)(iii)(D)). Notwithstanding, the Illinois EPA may upon request of the Permittee provide more time for testing (if such time is reasonably needed to

schedule and perform testing or coordinate testing with seasonal conditions) or waive this requirement (if other information, e.g., the margin of compliance shown by previous testing, indicates compliance at such higher load).

- * For this purpose, load shall be expressed in terms of either gross megawatt output or steam flow, consistent with the form of the records kept by the Permittee pursuant to Condition 7.1.9(a)(i).
- ii Subsequent PM emission measurements shall be conducted within a time period determined from the results of the preceding measurements compared to the applicable emission standard, as follows:
 - A. If the compliance margin is less than 20 percent, with 15 months of the previous measurement.
 - B. If the compliance margin is between 20 and 40 percent, with 27 months of the previous measurement.
 - C. If the compliance margin is greater than 40 percent, with 39 months of the previous measurement.
- iii. Measurements of CO emissions shall be made as
 follows:
 - A. In conjunction with the initial measurements of PM emissions as required above, if not otherwise performed earlier in conjunction with emission testing or relative accuracy testing for SO_2 or NOx .
 - B. In conjunction with the subsequent measurements of PM emissions, unless performed in conjunction with prior testing for SO_2 or NOx or the previous CO measurement is no more than 100 ppm at 50 percent excess air, in which case CO measurements need not accompany the next PM measurements following the measurement in which CO emissions were shown to be no more than 100 ppm.

from the boiler conducted during the next quarter while firing alternative fuel or process waste in the boiler.

- B. The Permittee shall conduct such measurements while firing the boiler with 1.25 times the greatest percentage of alternative fuel material or process waste that it would normally fire in the boiler. If the boiler has been firing a mix of alternative fuel materials or process wastes, the mix of fuel during such measurements shall be approved by the Illinois EPA.
- C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials and process wastes burned in a boiler during a quarter is more than the percentage of such material in the fuel supply to the boiler when previous emission measurements were conducted.
- v. Measurements of PM or CO emissions shall also be conducted within 90 days (or such later date set by the Illinois EPA) following a reasonable request by the Illinois EPA for such measurements.
- b. i. These measurements shall be performed at the maximum operating loads of the affected boilers and other operating conditions that are representative of normal operation. In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.
 - ii. Measurements shall taken at an appropriate location in the stack associated with each pair of affected boilers* or another location in the exhaust ductwork of an individual boiler as approved by the Illinois EPA.
 - * If both boilers are operating, the boilers and their associated controls shall be operated in a similar manner while measurements are being performed, so that the results typify both boilers. If emission unit operation differs significantly, the Permittee may have to perform further measurements or separate measurements for each boiler at the request of the Illinois EPA, in accordance with Condition 7.1.7(a)(i).

iii. The following test methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

Location of Sample Points USEPA Method 1
Gas Flow and Velocity USEPA Method 2
Flue Gas Weight USEPA Method 3
Moisture USEPA Method 4
Particulate Matter (PM) USEPA Method 5
Carbon Monoxide (CO) USEPA Method 10
Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA

- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan. [35 IAC 283.220 and 283.230]
 - i. The Permittee shall submit this test plan at least 60 days prior to the actual date of testing and the test plan shall include the information specified by Condition 8.6.2.
 - ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.
- e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the

information specified in Condition 8.6.3 and the following information:

- i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule;
- ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a);
- iii. Detailed description of operating conditions during testing, including:
 - A. Source(s) of fuel and specifications
 (ash, sulfur and heat content);
 - B. Boiler information, i.e., firing rate of each boiler (million Btu/hr), composition of fuel as burned (ash, sulfur and heat content) and fuel blending ratio (%), if a blend of fuels is burned;
 - C. Control equipment information, i.e., equipment condition and operating parameters during testing; and
 - D. Load during testing (gross megawatt output and steam flow).
- iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- v. The opacity data (6-minute averages) measured during testing.

7.1.8 Monitoring Requirements

- a. Pursuant to 40 CFR 75.14 and Section 35.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers. For this purpose, "shared" monitoring systems may be operated at locations in the stacks that are common to pairs of affected boilers.
 - i. This monitoring equipment shall be operated pursuant to written monitoring procedures that include a quality assurance/control plan, which procedures shall reflect the manufacturer's instructions as adapted by the Permittee based on its experience.
 - ii. This monitoring equipment shall meet the design, installation, equipment, and

performance specifications in Performance Specification B in 40 CFR Part 60, Appendix B.

- iii. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.
- iv. These monitors shall be the primary basis for quarterly reporting of exceedances of Conditions 5.2.2(b) and 7.1.4(a). (See Condition 7.1.10).

Note: Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee must conduct opacity monitoring on the affected boilers in accordance with the NSPS pursuant to the federal Acid Rain program.

- b. Pursuant to Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of SO₂ from affected boilers which shall be used to demonstrate compliance with the limits in Condition 7.1.4(b) based on the average hourly SO₂ emission rate determined from monitored data from three-hour block averaging periods. This monitoring equipment shall be operated pursuant to written monitoring procedures that include a quality assurance/control plan, which procedures address the requirements in 40 CFR Part 75.
- C. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boilers for various parameters, including SO₂, NO_x, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.2.3.) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2.)

7.1.9 Recordkeeping Requirements

a. Records for Fuel Usage

Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain the following operating records for affected boilers:

i. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each of the affected boilers.

- ii. Records for each day when a fuel material other than coal, gas or oil was burned, including the estimated amount of each such material burned and the boiler(s) in which it was burned;
- iii. A. Records of agreements with suppliers of alternative fuels or off-site wastes, including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.
 - B. Records for each load of such material received at the source, which at a minimum shall include date, supplier name, type of material and amount (tons).
- iv. Total operating hours (hours/quarter) for each
 affected boiler and each pair of boilers
 (hours when fuel is burned in one or both
 boilers).
- v. Amount of coal consumed (tons/quarter).
- vi. Amount of each other fuel material consumed (tons, gallons, cubic feet per quarter, as appropriate).
- vii. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.1.4(a) (35 IAC Part 212, Subpart E) that is different from that recorded pursuant to the federal Acid Rain Program, heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load, as recorded pursuant to Condition 7.1.9, to hourly heat input.
- b. Records for Electrostatic Precipitators

Pursuant to Section 39.5(7) of the Act, the Permittee shall maintain records for the electrostatic precipitator (ESP) on each affected boiler for the following operating parameters. Data shall be recorded at least once per shift when the affected boiler is in operation. For this purpose, if numerical data is not displayed in the control room, the Permittee may record the status of the individual fields, provided that numerical data is recorded at least once per day.

- i. Fields in service.
- ii. Primary voltages and currents.

- iii. Secondary voltages and currents.
- iv. Sparking rates.
- c. Records for Continuous Opacity Monitoring Systems

Pursuant to 35 IAC 201.407 and Section 39.5(7)(b) of the Act, the Permittee shall maintain records for the opacity monitoring system on each pair of affected boilers required by Condition 7.1.8(a) that as a minimum shall include:

- i. Operating records for each opacity monitoring system, including:
 - A. Opacity measurements;
 - B. Continuous monitoring system performance testing measurements;
 - C. Performance evaluations and other quality assurance /control activities;
 - D. Calibration checks;
 - E. Maintenance and adjustment performed;
 - F. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason; and
 - G. Quarterly reports submitted in accordance with Condition 7.1.10(a) and (d).
- ii. Records for each affected boiler that identify the upper bound of the normal range of opacity measurements from the boiler, considering an hour of operation, within which compliance with Condition 7.1.4(a) is assured, with supporting explanation and documentation. At a minimum, these records shall be reviewed and revised by the Permittee as necessary following performance of additional PM emission tests on affected boilers.
- iii. Records to address compliance with Conditions 5.2.2(b), 7.1.4(c) and 7.1.4(a), including:
 - A. Each 6-minute period when the opacity was above the limitation of Conditions 5.2.2(b) and 7.1.4(c) (30 percent opacity) with date, time, whether it occurred during startup, malfunction/breakdown, or shutdown, and further explanation of the incident; and

- B. Each hour when the measured opacity of an affected boiler was above the normal range, as specified above in Condition 7.1.9(c)(ii), with date, time, operating condition of the boiler if during startup, malfunction/breakdown, or shutdown, further explanation of the incident, and whether particulate matter emissions may have exceeded the limit of Condition 7.1.4(a), with explanation.
- d. Records for Continuous SO₂ Monitoring Systems

Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records for the SO_2 monitoring system on each affected boiler required by Condition 7.1.8(b) that as a minimum shall include:

- i. Operating records for each SO₂ monitoring system, including:
 - A. SO_2 emission measurements;
 - B. Continuous monitoring system performance testing measurements;
 - C. Performance evaluations and other quality assurance /control activities;
 - D. Calibration checks;
 - E. Maintenance and adjustments performed;
 - F. Periods when an SO_2 monitor for a stack was inoperative, with date, time and reason;
 - G. Data reduction information used pursuant to Condition 7.1.12(c); and
 - H. Quarterly reports submitted in accordance with Condition 7.1.10(a)(F).
- ii. Records to verify compliance with the limitation of Condition 7.1.4(b), including:
 - A. SO_2 emissions in the terms of the applicable standard (lb/hour) from the affected boilers on an hourly basis, as derived from the data obtained by the SO_2 monitoring equipment; and
 - B. The date and time of any three-hour block averaging period when the total SO_2 emission rate, as recorded above, exceeded 36,865 lb/hour as allowed by

Condition 7.1.4(b), with the calculated SO_2 emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitation of Condition 7.1.4(b).

e. Records for Startups

Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records, related to startup of affected boilers that at a minimum shall include the following:

- i. Records of the source's established startup procedures for affected boilers (as summarized in the CAAPP application); and
- ii. Records for each startup of an affected boiler that may result in excess opacity or PM emissions, including:
 - A. Date and description of startup, e.g., startup following scheduled maintenance outage;
 - B. Duration of the startup, from initial firing of fuel to achievement of normal operation, i.e., stable operation firing the principle fuel with control equipment operating to enable compliance; and
 - C. If normal operation is not achieved within 16 hours or if established startup procedures are not followed:

An explanation why startup could not be completed sooner or established procedures could not be followed.

Documentation for the established startup procedures that were followed.

The time at which solid fuel (coal) firing was begun.

The flue gas temperature at which the electrostatic precipitator was energized, if coal was fired before the electrostatic precipitator was energized.

f. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, the Permittee shall maintain records, related to malfunction and breakdown for affected boilers that as a minimum, shall include:

- i. A maintenance and repair log for each affected boiler and associated equipment, listing activities performed with date; and
- ii. Records for each incident when operation of an affected boiler continued during malfunction or breakdown with excess emissions, as provided by Condition 7.1.3(c), including the following information:
 - A. Date and duration of malfunction or breakdown;
 - B. A description of the malfunction or breakdown;
 - C. The corrective actions used to reduce the quantity of emissions and the duration of the incident;
 - D. Confirmation of fulfillment of the requirements of Condition 7.1.10(b), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.1.10(b)(ii); and
 - E. If particulate matter emissions may have exceeded the applicable hourly standard (Condition 7.1.4(a)) or for two or more hours opacity exceeded the applicable standard (Condition 5.2.2(b)):

An explanation why continued operation of the affected boiler was necessary.

The preventative measures planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to operating and maintenance procedures for affected boilers.

An estimate of the magnitude of excess emissions occurring during the incident.

q. Records for NOx Emissions

The Permittee shall maintain records as needed to demonstrate compliance with the limitations in Condition 7.1.6 for NOx emissions from the affected boilers (tons NOx/month), based on the continuous emission monitoring systems for NOx required by the federal Acid Rain program. (See Section 6.2 of this permit.)

h. Records for Continuous Emission Monitoring Required by the Acid Rain Program

Records for the continuous emission monitoring required for the Acid Rain Program should be kept by the Permittee in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions.

[See Condition 6.2.3]

7.1.10 Reporting Requirements

a. Quarterly Operating Report

In place of the semi-annual reports required by General Permit Condition 8.6.1, the Permittee shall provide a quarterly operating report to the Illinois EPA pursuant to Section 39.5(7)(b) of the Act.

- i. This report shall include the following information for operation during the quarter:
 - A. The total operating hours for each affected boiler or each pair of boilers (hours when one or both boilers are burning fuel), as also reported in accordance with 40 CFR Part 75;
 - B. The greatest load achieved by each affected boiler (steam flow or gross megawatts);
 - C. A discussion of significant changes in the fuel supply to the affected boilers, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired;
 - D. The number of startups for each affected boiler;
 - E. A narrative discussion based on the records required by Condition7.1.9(f)(ii) for incidents when operation

of an affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.1.10(b)(ii); (See also notification and reporting requirements for individual incidents in Condition 7.1.10(b).)

- F. The information related to SO_2 emissions during the quarter specified by Condition 7.1.10(c):
- G. The information related to opacity and particulate matter emissions during the quarter specified by Condition 7.1.10(d);
- H. A summary of other noncompliance as separately reported pursuant to Condition 7.1.10(e)(ii).
- ii. This report shall be submitted promptly after the end of every calendar quarter as follows:

Monitoring Period Submittal Deadline

January - March May 15
April - June August 15
July - September November 15
October - December February 15

b. Reporting of Continued Operation During Malfunctions And Breakdowns for Affected Boilers

Pursuant to 35 IAC 201.263, the Permittee shall provide the following notifications and reports to the Illinois EPA, concerning incidents when operation of an affected boiler continued during malfunction or breakdown with excess emissions as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during shutdown of the boiler.

i. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) as soon as possible during normal working hours for each incident in which the applicable particulate matter emission standard (Condition 7.1.4(a)) could be exceeded or in which the opacity from a pair of affected boilers exceeds 30 percent for more than five consecutive 6-minute averaging periods, unless the Permittee has begun the shutdown of the responsible boiler(s) by such time. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds 30 percent for less than

six 6-minute averaging periods in a row, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10(a)(i)(E).)

- ii. Upon conclusion of each incident in which the applicable particulate matter emission standard may have been exceeded or in which the exceedance of the opacity standard are two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed explanation of the event, an explanation why continued operation of the affected boiler was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected boiler was taken out of service.
- c. Reporting of Excess SO₂ Emissions

Pursuant to Sections 39.5(7)(f) of the Act, the Permittee shall report the following information for each pair of affected boilers to the Illinois EPA with its quarterly operating report pursuant to Condition 7.1.10(a):

- i. Summary information on the performance of each SO_2 monitoring system, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the continuous SO_2 monitoring system was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- If specifically requested by the Illinois EPA ii. or the SO₂ monitoring system downtime was more than 5 percent of the total operating time for the pair of affected boilers during the quarter, the date and time identifying each period during which the monitoring system was inoperative except for zero and span checks, the nature of the system repairs or adjustments, a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the system was out-of-control as addressed by 40 CFR 75.24.

- iii. The following information for each period when SO_2 emissions were in excess of the limitation in Condition 7.1.4(b)*. When there were no such exceedances, this shall be stated in the report.:
 - A. The starting date and time of the SO_2 excess emissions.
 - B. The duration of the excess emissions.
 - C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.1.9(d)(ii).
 - D. The cause of the excess emissions, if known.
 - E. Corrective actions and actions taken to lessen the emissions.
- * For SO_2 emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.1.4(b). The records for excess emissions shall consist of a three-hour block emission averages during which the limitation was exceeded.
- d. Reporting of Opacity and Particulate Matter Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall report the following information for each pair of affected boilers to the Illinois EPA with its quarterly operating report pursuant to Condition 7.1.10(a):

- i. Summary information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" in accordance with 40 CFR 60.7(d). When no excess opacity occurred or the continuous opacity monitoring system was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- ii. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative, if requested by the Illinois EPA or the opacity monitoring system downtime was more than 5 percent of the total operating time for the affected boilers during the quarter;
- iii. The following information for each period when opacity was in excess of the limitations in Conditions 5.2.2(b) and 7.1.4(c) if the total duration of excess opacity during the quarter

exceeded one-half percent of the total operating time for the pair of affected boilers during the quarter or if requested by the Illinois EPA:

- A. The starting dates and time of the excess opacity;
- B. The duration of the excess opacity;
- C. The magnitude of excess opacity, based on six minute average opacity, including:
 - The percent opacity for each 6 minute increment; and
 - II. The start and stop time of each six minute increment in excess of the limitation;
- D. The cause of the excess opacity, if known, including which boiler or boilers were contributing to excess opacity and whether such excess emissions occurred during startup or malfunction/breakdown of the boiler;
- E. Corrective actions and actions taken to lessen the emissions;
- F. The information specified by Condition 7.1.10(e)(ii), if not otherwise required to be submitted.

Note: Because the affected boilers are subject to the reporting requirements for opacity of the NSPS, 40 CFR 60.7(c) and (d), as set forth above, the boilers are not subject to reporting pursuant to 35 IAC 201.405 (35 IAC 201.403(a)).

- iv. The following information for each period when particulate matter emissions were in excess of the limitation in Condition 7.1.4(a). If there were no such exceedances during the reporting period, the quarterly report shall so state.
 - A. The starting dates and time of the excess emissions;
 - B. The duration of the excess emissions;
 - C. The magnitude of excess emissions;
 - D. The information or means by which excess emissions were indicated or identified;

- E. The cause of the excess emissions, if known, including which boilers were contributing to excess emissions and whether such excess emissions occurred during startup or malfunction/breakdown of the boiler; and
- F. Corrective actions and actions taken to lessen the emissions.
- e. Prompt Reporting of Deviations

For the affected boilers, the Permittee shall promptly notify the Illinois EPA of deviations from applicable permit requirements [Section 39.5(7)(f)(ii) of the Act]. For this purpose, prompt notification shall be considered:

- i. Reporting as specified above Conditions 7.1.10(b), (c), and (d) for deviations from Conditions 5.2.2(b) and 7.1.4.
- ii. Notification within 30 days for deviations from Condition 7.1.6, with a copy of applicable records for such incident or a description of the incident and a discussion of the probable cause of such deviations, the corrective actions taken, and the preventative measures taken.
- iii. Reporting with the quarterly reports required by Condition 7.1.10(a) for deviations from other applicable requirements, e.g., monitoring and recordkeeping requirements. For this purpose, these reports shall include a description of each incident, a discussion of the probable cause of the deviation, the corrective actions taken, and the preventative measures taken.

f. Acid Rain Program Reporting

Pursuant to Sections 412 of the Clean Air Act and 40 CFR Part 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports. [See Condition 6.2.4] Pursuant to Section 39.5(17) (m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

7.1.11 Operational Flexibility/ Anticipated Operating Scenarios

The Permittee is authorized to make the following operational changes with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Firing of coal or a mix of coal from different suppliers.
- c. Firing of the following materials in conjunction with firing of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boilers and that such materials do not make up more than 25 percent by weight of the fuel supply to the boiler on a quarterly basis:
 - i. Other process wastes generated at the source in addition to used oil and boiler cleaning residue.
 - ii. Alternative fuels that do not constitute waste and were not generated from municipal waste or hazardous waste, such as petroleum coke, tire derived fuel (as defined at Section 54.10b of the Act), clean lumber and wood waste (as defined at 40 CFR 60.2265), shredded polyethylene agricultural containers, and seed corn, provided that such materials are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel).

Note: Other requirements unrelated to air pollution control may apply to firing of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

7.1.12 Compliance Procedures

a. i. Compliance with the opacity limitation of Conditions 5.2.2(b) and 7.1.4(c) (30 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with

the requirements of Condition 7.1.8(a) and the recordkeeping requirements of Condition 7.1.9.

- ii. Notwithstanding the above, should the Permittee choose to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent (6-minute average) from affected boilers, the Permittee shall do the following:
 - A. Maintain records for each pair of boilers of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 10 seconds apart, or a record of 1-minute average opacity data determined from six or more data points equally spaced during each minute period;
 - B. Have the capability to review such shortterm opacity data to identify:
 - For each pair of affected boilers, any hour in which opacity, exceeded 30 percent, and then, in such hour record:

the duration of opacity in excess of 30 percent,

whether opacity ever exceeded 60 percent, and

whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate;

- II. For each pair of affected boilers, whether opacity in excess of 30 percent occurred in more than three hours in a 24 hour period; and
- III. For all pairs of affected boilers, whether opacity exceeded 30 percent from more than one pair of affected boilers in any hour.
- C. In the reports required by Condition 7.1.10(d), confirm that the relevant short-term opacity data, reviewed as above, shows that the terms of 35 IAC 212.123(b) are satisfied, when 35 IAC 212.123(b) is relied upon as the basis to claim that an affected boiler did not violate Conditions 5.2.2(b) and 7.1.4(c) even though opacity on a 6-minute average exceeded 30 percent; and

- D. Notify the Illinois EPA at least 15 days prior to changing its procedures associated with reliance on 35 IAC 212.123(b), to allow the Illinois EPA to review the new recordkeeping and data handling practices planned by the Permittee.
- b. Compliance with PM limitations of Condition 7.1.4(a) is addressed by continuous opacity monitoring in accordance with Condition 7.1.8, PM testing in accordance with Condition 7.1.7, and the recordkeeping required by Conditions 7.1.9.
- c. Compliance with the SO_2 emission limitation of Condition 7.1.4(b) is addressed by continuous emission monitoring in accordance with the requirements of Condition 7.1.8and the recordkeeping required by Condition 7.1.9(d).
- d. Compliance with the CO emission standard of Condition 7.1.4(d) is addressed by emission testing in accordance with Condition 7.1.7.

Note: Further compliance procedures for CO emissions are not set by this permit as compliance is assumed to be inherent in operation of an affected boiler under operating conditions other than startup or shutdown.

- 7.1.13 Applicable Requirements of 35 IAC Part 217, Subpart V.
 - a. Beginning in 2003, during each ozone control period, either:
 - i. The NO_x emissions from each affected boiler shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period [35 IAC 217.706], or
 - ii. The NO_x emissions of the affected boiler and other eligible EGU that are participating in a NO_x averaging demonstration with the affected EGU as provided for by 35 IAC 217.708 shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period for these EGU [35 IAC 217.708(a) and (b)].

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NOx for purposes of these standards are generally calculated in accordance with the federal Acid Rain program and are different from the emissions determined for purposes of the NOx Trading Program.

- b. If the Permittee elects to have an affected boiler comply by participation in a NO_x averaging demonstration as provided for and authorized above:
 - i. The affected boiler shall be included in only one NO_x averaging demonstration during each ozone control period [35 IAC 217.708(d)],
 - ii. The NO_{x} averaging demonstration shall only include other EGU that are authorized through a federally enforceable permit to participate in a NO_{x} averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request [35 IAC 217.708(c) and (g)],
 - iii. The effect of failure of the NO_x averaging demonstration to show compliance shall be that the compliance status of the affected boiler shall be determined pursuant to Condition 7.4(a)(i) as if the NO_x emission rates of the affected boiler were not averaged with other EGU [35 IAC 217.708(g)].
- c. For the purpose of determining compliance with the NO_x emission standards in Condition 7.1.13(a), the Permittee shall determine the heat input and NO_x emissions of each affected boiler in accordance with 35 IAC 217.710(c).
- d. Beginning in 2003, the Permittee must comply with the recordkeeping and reporting requirements of 35 IAC 217.712(b) related to the heat input and $\rm NO_x$ emissions of each affected boiler.
- e. Beginning in 2003, by November 30 of each year, the Permittee shall submit a report to the Illinois EPA that demonstrates that each affected boiler has complied with Condition 7.1.13(a). These reports shall be accompanied by a certification statement signed by a responsible official for the Permittee as specified by 35 IAC 217.712(c). [35 IAC 217.712(c), (d) and (e)]
 - i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.13(a)(i), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO_{x} emissions of the unit for the ozone control period.
 - ii. If the Permittee is demonstrating compliance by means of " NO_x averaging" as authorized by Condition 7.1.13(a)(ii), this report shall

contain the information specified by 35 IAC 217.712(e) and other related information as follows:

A. In all cases, for each affected boiler or unit covered by this permit that is participating in the demonstration

Identification of the other EGU that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.13(e)(ii)(B), below.

A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit [35 IAC 217.708(c) and (g)].

The average NO_x emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e)(2) and (3), including the heat input and NO_x emissions of the unit for the ozone control period.

A statement whether the unit would show compliance on its own in the absence of averaging.

B. If the Permittee is the lead party for a NO_x averaging demonstration:

Copies of the information submitted by other parties for the EGU participating in the demonstration, which include all material required by Condition 7.1.13(e)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

The averaged NO_x emission rate for all EGU participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e)(1).

A statement whether the demonstration shows compliance.

f. Beginning in 2003, the Permittee must keep and maintain for a period of at least 5 years all records and data necessary to demonstrate compliance with the applicable requirements of 35 IAC Part 217 Subpart V and upon request make such records and data available to Illinois EPA and USEPA representatives for inspection and copying during working hours. The Permittee shall submit copies of any such records and data to the Illinois EPA within 30 days after receipt of a written request from the Illinois EPA [35 IAC 217.712(f) and (g)].

7.2 <u>Unit 2 - Coal Handling Operations</u> Various control measures

7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including a railroad car dumper, various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and bunkers. These operations first handle coal, as supplied by the mine and then, after the crushers, coal that has been processed at the source by the coal processing operations (See Section 7.3). Particulate matter (PM) emissions associated with these operations are controlled by various measures including the moisture content of the coal, application of dust suppressant to the coal, enclosure and covers, and dust collection devices.

7.2.2 List of Emission Equipment and Pollution Control Equipment

The following is a list of the coal handling operations and associated control systems at the source as of the "date issued" as shown on page 1 of this permit.

Truck, Rail and Barge Receiving

Truck Pit, Barge Hopper and Railcar Dumper Outdoor Conveyors (C-21¹, 21A, 22¹, 22A and 22B) Dust Suppressant Application System

Crusher House

Outdoor Conveyors (C-31², 32², 33², 61³ and 62³) Various Conveyors Entirely Inside Building Enclosure and Dust Suppressant Application System

Outdoor Storage

Storage Piles
Outdoor Conveyors (C-23⁴, 23D, 24⁴, 24D, 25, 63, 64 and 65)
Dust Suppressant Application System

Tripper Room (Distribution to Bunkers)

Bunkers

Various Conveyors Entirely Inside Building Enclosure, Dust Suppressant Application System, and Wet Dust Collectors (DC1, DC2, and DC3)

Notes:

- 1. Conveyor connects Receiving to the Crusher House
- 2. Conveyor connects the Crusher House to the Tripper Room
- 3. Conveyor connects the Crusher House to Outdoor Storage
- 4. Conveyor connects Outdoor Storage to the Crusher House

7.2.3 Applicability Provisions

For the purpose of these unit-specific conditions, an "affected operation" is an emission unit that is used solely for the purpose of transferring coal from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.2.1 and 7.2.3.

7.2.4 Applicable Emission Standards

- a. Each affected operation shall comply with the standard in Condition 5.2.2(a), which addresses visible emissions of fugitive particulate matter, as defined by 35 IAC 211.2490, from the operation. [35 IAC 212.301]
- b. Each affected operation shall comply with the standard in Condition 5.2.2(b), which addresses the opacity of the emission of smoke or other particulate matter from the operation. [35 IAC 212.123]
- 7.2.5 Non-Applicability of Regulations of Possible Concern

Affected operations are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323.

7.2.6 Operational Limits and Emission Limits

a. The throughput of the following affected operations associated with Outdoor Storage shall not exceed the following limits (T1R):

	Throughput
Affected Operation	(ton/hour)
Storage Pile Feed Conveyors (C-61, 62,	4500
63, 64 and 65)	
Pile Loading (Stackers)	4500
Storage Pile Loadout Conveyors (C-23D,	2500
24D and 25)	

b. Annual emissions of particulate matter (PM) from Outdoor Storage (the Coal Yard) shall not exceed 65.6 tons/year. Compliance with this annual emission limit shall be determined from a running total of 12 months of emission data, calculated using appropriate emission factors. For this purpose, the Permittee shall use emission factors taken from

published documents or developed from emission testing that the Permittee has conducted. (Refer to Conditions 7.2.10(b) and (c)). [T1R]

These limitations replace operational limitations established by Construction Permit 90070073, issued August 29,1990. These limitations were revised to provide operating flexibility and ease of enforcement, recognizing that the changes made by the Permittee in 1990 to its existing Coal Yard were intended to provide greater flexibility in transferring coal without increasing the amount of coal handled, and were accompanied by improvements, such as the tube stackers for the storage piles and dust suppression on conveyors, that reduced particulate emissions.

7.2.7 Control Requirements

- a. The Permittee shall implement and maintain control measures for the affected operations, such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, that minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission standards in Condition 7.2.4 and 7.2.6. [Section 39.5(7)(a) of the Act]
- b. The Permittee shall operate and maintain each affected operation with the control measures identified in Condition 7.2.10(b).

7.2.8 Testing Requirements

None

7.2.9 Inspection Requirements

The Permittee shall perform inspections on at least a monthly basis of affected operations, including associated control measures, while the operations are in use, to confirm compliance with the requirements of Condition 7.2.7. These inspections may be scheduled so that only a number of affected operations are reviewed during each inspection, provided however, that all affected operations shall be inspected at least once during each calendar quarter. [Section 39.5(7)(a) of the Act]

7.2.10 Recordkeeping Requirements

The Permittee shall keep the following records related to the affected operations pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall keep a record, which shall be kept up to date, of the maximum operating capacity of each affected operation.
- b. i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures that it is currently following for different affected operations pursuant to Condition 7.2.4(b) and 7.2.6(b). These control measures, as defined by the Permittee through these records, are referred to as the "established control measures" in this subsection of the CAAPP permit.
 - ii. Accompanying this record, the Permittee shall maintain documentation for efficiencies of control measures and the emission factors that it is using to determine the emissions from the affected operations.
- c. The Permittee shall maintain the following operating records:
 - i. The amount of coal and other solid fuels received at the source (tons/month, by type of fuel);
 - ii. The amount of coal and other solid fuels sent to the outdoor storage piles (tons/month, by type of fuel).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.9:
 - i. Date and time the inspection was performed and name(s) of inspection personnel;
 - ii. Area or specific operations inspected;
 - iii. The observed condition of the established control measures, for the inspected area or operations;
 - iv. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., recommended action has been taken, is yet to be performed or no longer appears to be required; and
 - v. A summary of compliance, compared to the established control measures.

- e. The Permittee shall maintain records of the following for each incident when any affected operation operated without the established control measures:
 - i. The date of the incident and identification of the affected operation(s) that were involved;
 - ii. A description of the incident, including the established control measures that were not present or implemented; the established control measures that were in use, if any; other control measures or mitigation measures that were implemented, if any; and the magnitude of the PM emissions during the incident;
 - iii. The time and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel;
 - iv. The length of time after the incident was identified that the affected operation(s) continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected operation(s) ran without established control measures and the estimated amount of coal handled during the incident;
 - vi. A discussion of the probable cause of the incident and any preventative measures taken; and
 - vii. A discussion whether Condition 7.2.4(b) may have been violated during the incident, with supporting explanation as needed.
- f. The Permittee shall keep a maintenance and repair log for each item of air pollution control equipment, i.e., each dust suppressant application system and each dust collection device, associated with affected operations. This log shall list the date and nature of maintenance and repair activities performed on the item of equipment. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- g. To demonstrate compliance with Condition 7.2.6(b), the Permittee shall keep records for Outdoor Storage

(the Coal Yard) of PM emissions (tons/month and tons/year), with supporting calculations.

7.2.11 Reporting Requirements

- a. For affected operations, the Permittee shall promptly notify the Illinois EPA of deviations from applicable requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act]:
 - i. Notification within 30 days for operation of an affected operation that was not in compliance with applicable requirements in Conditions 7.2.7 that continued for more than 12 hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.2.10(e).
 - ii. Notification with the quarterly reports required by Condition 7.1.10(a) for other deviations, including deviations from applicable emission standards, inspection requirements and recordkeeping requirements.

7.2.12 Operational Flexibility/Anticipated Operating Scenarios

- a. The Permittee is authorized to make the following physical or operational change with respect to affected operations without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity for which a construction permit is required pursuant to 35 IAC 201.142:
 - i. Handling of solid fuels other than coal.
 - ii. Operation of additional dust suppressant systems.
 - iii. Operation of additional dust collection
 equipment.
 - iv. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling PM emissions that the device(s) being replaced.

7.2.13 Compliance Procedures

- a. Compliance with the emission standards of Condition 7.2.4 is addressed by the control measures, inspections and recordkeeping required by Conditions 7.2.7, 7.2.9 and 7.2.10, respectively.
- b. Compliance with the emission limitation of Condition 7.2.6(b) is addressed by the control measures, inspections and recordkeeping required by Conditions 7.2.7, 7.2.9 and 7.2.10, respectively, and use of appropriate emission factors as required by Condition 7.2.6(b).

7.3 <u>Unit 3 - Existing Coal Processing Operations</u> Various Control Measures

7.3.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers with crushers or "grizzlies" that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures including enclosure and application of dust suppressant.

7.3.2 List of Emission Equipment and Pollution Control Equipment

The following is a list of the coal processing equipment and associated control systems at the source as of the "date issued" as shown on page 1 of this permit. The application states that this processing equipment was all constructed prior to April 14, 1972.

Equipment			
Name	Description	Emission Control Equipment	
Crusher 1	Coal Crushing	Various Control Measures	
	Operation	Including Enclosure and Dust	
		Suppressant Application	
Crusher 2	Coal Crushing	Various Control Measures	
	Operation	Including Enclosure and Dust Suppressant Application	
Crusher 3	Coal Crushing	Various Control Measures	
	Operation	Including Enclosure and Dust	
		Suppressant Application	

7.3.3 Applicability Provisions

For the purpose of these unit-specific conditions, an "affected process" is an individual process emission unit that prepares coal for use as a fuel by crushing the coal as described in Conditions 7.3.1 and 7.3.2.

7.3.4 Applicable Emission Standards

- a. Each affected process shall comply with the standard in Condition 5.2.2(a), which addresses visible emissions of fugitive particulate matter, as defined by 35 IAC 211.2490, from the process. [35 IAC 212.301]
- b. Each affected process shall comply with the standard in Condition 5.2.2(b), which addresses the opacity of smoke or other particulate matter from the process. [35 IAC 212.123]
- c. Each affected process shall comply with 35 IAC 212.322, which provides that "...no person shall cause or allow the emissions of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification

commenced prior to April 14, 1972, which either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rate..." as specified by the following equation from 35 IAC 212.322(b):

$$E = C + A(P)^B$$

Where:

P = Process weight rate, ton/hour;

E = Allowable emission rate, pound/hour;

	For P up to 30	For P in Excess of 30
A =	4.10	55.0
B =	0.67	0.11
C =	0	- 40.0

7.3.5 Non-Applicability of Regulations of Possible Concern

None

7.3.6 Operational Limits

None

- 7.3.7 Control Requirements
 - a. The Permittee shall implement and maintain control measures for the affected processes, such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, that minimize visible emissions and provide assurance of compliance with the applicable emission standards in Condition 7.3.4. [Section 39.5(7)(a) of the Act]
 - b. The Permittee shall operate and maintain each affected process with the control measures identified in Condition 7.3.10(b).
- 7.3.8 Testing Requirements

None

7.3.9 Inspection Requirements

The Permittee shall perform an inspection of each affected process, including associated control measures, on at least a weekly basis to confirm compliance with the control requirements of Condition 7.3.7.

7.3.10 Recordkeeping Requirements

The Permittee shall keep the following records related to the affected process pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall keep a record, which shall be kept up to date, of the maximum operating capacity of each affected process.
- b. i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures that it is currently following for affected processes pursuant to Condition 7.3.7(a). These control measures are referred to as the "established control measures" in this subsection of this permit.
 - ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the above established practices are sufficient to assure compliance with Condition 7.3.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the efficiency of the control measures and the emission factors that it is using to determine emissions from the affected processes. For this purpose, the Permittee shall use appropriate emission factors taken from published documents or developed from emission testing that the Permittee has conducted.
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.9, for each affected process:
 - i. Date and time the inspection was performed and name(s) of inspection personnel;
 - ii. The observed condition of the established control measures for the affected process;
 - iii. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required; and
 - iv. A summary of compliance, compared to the established control measures.

- d. The Permittee shall maintain records of the following for each incident when any affected process operated without the established control measures:
 - The date of the incident and identification of the affected process(es) that were involved;
 - ii. A description of the incident, including the established control measures that were not present or implemented; the established control measures that were present, if any; other control measures or mitigation measures that were implemented, if any; and the magnitude of the PM emission rate during the incident;
 - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel;
 - iv. The length of time after the incident was identified that the affected process(es) continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a description of any mitigation measures that were implemented during the incident;
 - v. The estimated total duration of the incident, i.e., the total length of time that the affected process(es) operated without established control measures and the estimated amount of coal processed during the incident;
 - vi. A discussion of the probable cause of the incident; and any preventative measures taken; and
 - vii. A discussion whether Condition 7.3.4(b) or (c)
 may have been violated during the incident,
 with supporting explanation and calculations
 as needed.
- e. The Permittee shall keep maintenance and repair logs for each item of air pollution control equipment, i.e., each dust suppressant application system and each dust collection device, associated with affected processes. This log shall list the date and nature of maintenance and repair activities performed on the item of equipment. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

7.3.11 Reporting Requirements

- a. For affected processes, the Permittee shall promptly notify the Illinois EPA of deviations from applicable requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act]:
 - i. Notification within 30 days for operation of an affected process that was not in compliance with applicable requirements in Condition 7.3.7 that continued for more than one hour from the time it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.10(d).
 - ii. Notification with the quarterly reports required by Condition 7.1.10(a) for other deviations, including deviations from applicable emission standards, inspection requirements and recordkeeping requirements.

7.3.12 Operational Flexibility/Anticipated Operating Scenarios

- a. The Permittee is authorized to make the following physical or operational change with respect to each affected process without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity for which such a permit is required pursuant to 35 IAC 201.142:
 - i. Processing of solid fuels other than coal.
 - ii. Operation of additional dust suppressant systems.
 - iii. Operation of additional dust collection equipment.
 - iv. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling PM emissions that the device(s) being replaced.

7.3.13 Compliance Procedures

a. Compliance with the emission standards of Condition 7.3.4 is addressed by the control measures, inspections and recordkeeping required by Conditions 7.3.7, 7.3.9, and 7.3.10, respectively.

7.4 <u>Unit 4 - Gasoline Storage</u> Submerged Loading

7.4.1 Description

The Permittee stores gasoline for use in plant vehicles and equipment. Submerged loading is used to reduce emissions when gasoline is received.

7.4.2 List of Emission Equipment and Pollution Control Equipment

The following is a list of the gasoline storage tanks at the source as of the "date issued" as shown on page 1 of this permit.

Storage		Emission Control
Tank	Description	Equipment
Tank 1	Underground Tank, Nominal	Permanent Submerged
	Capacity 1,000 Gallons	Loading Pipe

7.4.3 Applicability Provisions

An "affected tank," for the purpose of these unit-specific conditions, is a storage tank described in Conditions 7.4.1 and 7.4.2. Affected tanks are at most subject to the VOM control requirements of 35 IAC 215.122(b). Accordingly, affected storage tanks have a capacity greater than 250 gallons but less than 10,000 gallons and are used to store a volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.

7.4.4 Applicable Emission Standards

Each affected tank shall be equipped and operated with a permanent submerged loading pipe, pursuant to 35 IAC 215.122(b). (The Illinois EPA has not approved use of other equivalent equipment in lieu of a permanent submerged loading pipe.)

7.4.5 Non-Applicability of Regulations of Possible Concern

None

7.4.6 Operational Limitations

None

7.4.7 Testing Requirements

None

7.4.8 Inspection Requirements

None

7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected tank to verify compliance with Condition 7.4.4, pursuant to Section 39.5(7)(b) of the Act:

- a. Design information for the tank or other documentation showing the presence of a permanent submerged loading pipe;
- b. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- c. Material throughput, gallons/year.

7.4.10 Reporting Requirements

For the affected tanks, the Permittee shall promptly notify the Illinois EPA of deviations from applicable requirements as follows. Notifications shall be submitted within 30 days of the deviation and include a description of the incident and a discussion of the probable cause of deviation, the corrective actions taken, and preventative measures taken. [Section 39.5(7)(f)(ii) of the Act]

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements and properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Storage and handling of E-85 ethanol and other vehicle fuels, including diesel fuel.

7.4.12 Compliance Procedures

Compliance with Condition 7.4.4 is addressed by the recordkeeping requirements of Condition 7.4.9.7.5

Unit 5 - Hydrochloric Acid Storage

Scrubber

7.5.1 Description

The Permittee stores hydrochloric acid, an inorganic material that the Permittee uses for water treatment. A scrubber is used to control emissions of acid from the tank when it is being filled.

7.5.2 List of Emission Equipment and Pollution Control Equipment

The following is a list of the hydrochloric acid storage tanks at the source as of the "date issued" as shown on page 1 of this permit.

Storage Tank	Description	Emission Control Equipment
Tank 1	Above Ground Tank, Nominal Capacity 6,000 Gallons	Scrubber

7.5.3 Applicability Provisions

An "affected tank," for the purpose of these unit-specific conditions, is an acid storage tank as described in Conditions 7.5.1 and 7.5.2. Storage of volatile organic liquids in an affected tank is not addressed by this Condition 7.5.

7.5.4 Applicable Emission Standards

None

7.5.5 Non-Applicability of Regulations of Possible Concern

None

7.5.6 Operational Limitations and Work Practices

The Permittee shall only load material into an affected tank when the associated scrubber is operating properly to control emissions of acid from the tank. [Section 39.5(7)(a) of the Act]

7.5.7 Testing Requirements

None

7.5.8 Inspection Requirements

None

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected tank, pursuant to Section 39.5(7)(b) of the Act:

- a. A loading log that identifies each time material is loaded into the tank, with date, amount of material loaded, and information to confirm operation of the scrubber;
- b. Maintenance and repair records for the tank and associated scrubber;
- c. Material throughput, gallons/year.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA within 30 days of deviations from Condition 7.5.6 [Section 39.5(7)(f)(ii) of the Act]. Such notifications shall be submitted within 30 days of the event and include a description of the incident and a discussion of the probable cause of deviation and the corrective actions and preventative measures taken.

7.5.11 Operational Flexibility/ Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Storage and handling of other inorganic acids.

7.5.12 Compliance Procedures

Compliance with Condition 7.5.6 is addressed by the recordkeeping requirements of Condition 7.5.9.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after June 30, 2003 unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA, as addressed by Section 6.2 of this permit. To the extent that the federal regulations promulgated under Title IV are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

- 8.4 Operational Flexibility/Anticipated Operating Scenarios
 - 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or

operational change, and the Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change [Section 39.5(12)(a) of the Act]. This notice shall:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

Monitoring Period

January - June

July - December

Report Due Date
September 1
March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;

- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA Air Compliance Section with a copy sent to the Illinois EPA Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
 - i. Illinois EPA Air Compliance Section

Illinois Environmental Protection Agency (MC 40) Bureau of Air Compliance & Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency Division of Air Pollution Control 2009 Mall Street Collinsville, Illinois 62234

iii. USEPA Region 5 - Air Branch

USEPA (AR - 17J) Air & Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604

Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

> Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section (MC 11) 1021 North Grand Avenue East

P.O. Box 19506 Springfield, Illinois 62794-9506

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
 - a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulation. [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:

- i. At reasonable times, for the purposes of assuring permit compliance; or
- ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit, shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit compliance certifications annually or more frequently as specified in the applicable requirement or by permit condition.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technologybased emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section
 39.5(7)(k) of the Act and the Permittee can
 identify the cause(s) of the emergency;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

cpr:psj

10.0 ATTACHMENTS

10.1 Attachment 1 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:	
Name:	
Official Title:	
Telephone No.:	
Date Signed:	

10.2 Attachment 2 - Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit, www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit,
www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form, CAAPP Form-199, which is available at: www.eps.state.il.us/air/caapp/199-caapp.pdf

10.3 Attachment 3
Acid Rain Permit (Pursuant to Title IV of the Clean Air Act)

217-782-2113 <u>CERTIFIED MAIL</u>

ACID RAIN PROGRAM PHASE II PERMIT

Electric Energy, Inc. Mr. Terence H. Larbes Designated Representative Post Office Box 165 Joppa, IL 62953

Oris No.: 887

IEPA I.D. No.: 127855AAC

Source/Unit: Joppa Steam/1-6
Date Received: December 19, 1997
Date Issued: December 14, 1998
Effective Date: January 1, 2000
Expiration Date: December 31, 2004

STATEMENT OF BASIS:

In accordance with Section 39.5(17)(b), Title IV; Acid Rain Provisions, of the Illinois Environmental Protection Act [415 ILCS 5/1 et Seq.] and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is revising this Acid Rain Program Phase II permit for the Joppa Steam plant to incorporate nitrogen oxides emission limitation compliance plan requirement.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDES (NO_x) REQUIREMENTS FOR EACH AFFECTED UNIT:

		2000	2001	2002	2003	2004
UNIT 1	SO ₂ Allowances, under Tables 2,3, or 4 of 40 CFR Part 73	5,286	5,286	5,286	5,286	5,286

UNIT 1	NO _x limit	Pursuant to 40 CFR part 76, Illinois EPA approves a NO_X standard emission limitation compliance plan for unit #1. The compliance plan is effective for calendar year beginning 2000 through calendar year 2004. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for tangentially fired boilers.
		In addition, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_{X} compliance plan and requirements covering excess emissions.

		2000	2001	2002	2003	2004
UNIT 2	SO ₂ Allowances, under Tables 2,3, or 4 of 40 CFR Part 73	4,522	4, 522	4, 522	4, 522	4, 522

UNIT 2	NOx limit	Pursuant to 40 CFR part 76, Illinois EPA approves a NO_x standard emission limitation compliance plan for unit #2. The compliance plan is effective for calendar year beginning 2000 through calendar year 2004. Under the compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for tangentially fired boilers.
		In addition, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

		2000	2001	2002	2003	2004
UNIT 3	SO ₂ Allowances, under Tables 2,3, or 4 of 40 CFR Part 73	5,151	5,151	5,151	5,151	5,151

UNIT 3	NOx limit	Pursuant to 40 CFR part 76, Illinois EPA approves a NO_X standard emission limitation compliance plan for unit #3. The compliance plan is effective for calendar year beginning 2000 through calendar year 2004. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for tangentially fired boilers.
		In addition, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

		2000	2001	2002	2003	2004
UNIT 4	SO ₂ Allowances, under Tables 2,3, or 4 of 40 CFR Part 73	4,771	4,771	4,771	4,771	4,771

UNIT 4	NOx limit	Pursuant to 40 CFR part 76, Illinois EPA approves a NO_X standard emission limitation compliance plan for unit #4. The compliance plan is effective for calendar year beginning 2000 through calendar year 2004. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for tangentially fired boilers.
		In addition, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

		2000	2001	2002	2003	2004
UNIT 5	SO ₂ Allowances, under Tables 2,3, or 4 of 40 CFR Part 73	4,793	4,793	4,793	4,793	4,793

UNIT 5	NOx limit	a NO $_{\rm X}$ standard emission limitation compliance plan for unit #5. The compliance plan is effective for calendar year beginning 2000 through calendar year 2004. Under the compliance plan, this unit's annual average NO $_{\rm X}$ emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for tangentially fired boilers. In addition, this unit shall comply with all other applicable requirements of 40 CFR part 76,			
		In addition, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.			

		2000	2001	2002	2003	2004
UNIT 6	SO ₂ Allowances, under Tables 2,3, or 4 of 40 CFR Part 73	4,459	4,459	4,459	4,459	4,459

	•	
UNIT 6	NOx limit	Pursuant to 40 CFR part 76, Illinois EPA approves a NO_X standard emission limitation compliance plan for unit #6. The compliance plan is effective for calendar year beginning 2000 through calendar year 2004. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/mmBtu for tangentially fired boilers.
		In addition, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The above aforementioned condition does not necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

COMMENTS, NOTES AND JUSTIFICATIONS: The SO₂ allowances revised per Electric Energy Inc.'s request are reflected as published in Federal Register dated September 28, 1998.

An initial NO_X compliance plan in which a standard emission limitation is chosen is effective beginning for calendar year 2000 and continues through the last calendar year that the acid rain permit is effective. Every subsequent standard emission limitation NO_X compliance plan submitted at the time of acid rain permit renewal will be effective for the same years that the acid rain permit is effective, including any partial years.

PERMIT APPLICATION: The NOx compliance plan and instructions are attached and incorporated as part of this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application.

If you have any questions regarding this permit, please contact Shashi Shah at 217-782-7395.

Original signed by Donald E. Sutton

Donald E. Sutton, P.E. Manager, Permits Section Division of Air Pollution Control

cc: John Justice, IEPA Region 3 Cecilia Mijares, USEPA Region V



Phase II NO_x Compliance Plan Page 1 of 2

	or more information, see instructions and refer to 40 CFR 76.9 his submission is: X New Revised										
STEP 1 Indicate plant name, State, and ORIS code from NADB, if applicable	Plant Name	Joppa S	IL State	00887 ORIS Code							
STEP 2	Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.										
	D# 1 Type T	ID# 2	ID# 3	ID# 4	ID# 5	ID# 6					
(a) Standard annual average emission limitation of 0.60 lbmmBtu (for Phase I dry bottom wall-fired botters)											
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired Bollers)	X		X	X	<u>X</u>	. 🗵					
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)											
(d) Standard annual average emission limitation of 0.46 birmiBtu (for Phase II dry bottom wall-fired boilers)				Ò							
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)											
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)											
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)											
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)											
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)		□.									
(j) NO. Averaging Plan (include NO. Averaging form)											
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission kimitation box above for most stringent limitation applicable to any unit utilizing stack)	X	X		· X	X						
(I) Common stack pursuant to 4 CFR 75.17(a)(2)(i)(B) with NO. Averaging (check the NO. Averaging Plan box and include NO. Averaging form)	io . 🗆										
EPA Form 7610-28 (3-97)											

STEP 2, cont'd. De 1	•									
Im EPA approved common description of the part of the		Plant Name (from S	Step 1) Joppa Stea	NO _x Compliance - Page 2 Page 2 of 2						
Type T Ty	STEP 2, cont'd.	ID# 1	ID# 2	ID# 3	n# 4	ID# 5	ID# 6			
stack apportionment method [0](2)(0)(1)(2)(0)(1)(3)(0)(1)(3)(0)(1)(3)(1)(1)(1)(3)(1)(1)(1)(3)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)										
Demonstration Period, Final AEL Perition or AEL Renewal form as appropriately (i) Petition for AEL general fo	(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(7	2)								
General review by U.S. and the standard requirements and certification, enter the name of the designated representative, sign & Standard Requirements and certification, enter the name of the designated representative, sign & Standard Requirements are listed in this source's Acid Rain Permit. Special Provisions for Early Election Units Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO, as provided under 40 CFR 76.8(e)(3)(iii). Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the collegations specified in 40 CFR 76.8 at that unit. The owners and operators of an unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the collegations specified in 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000 or January 1 of the calendar year for which the termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under an engage of the plan and the plan and year for which the termination of the plan and the plan and year for which the termination of the plan and year for which the termination is to take effect beginning January 1 of the year for which the endormance of the plan and year prior to 2000 but may not studied any year prior to 2000 dependent plan is terminated any year prior to 2000 the unit shall meet, beginning January 1 and the plan and year prior to 2000 the unit shall meet, beginning January 1 and the pl	Demonstration Period, Final AEL Petition, or AEL Renewal		. 🗆 📜			. 🗆				
Standard Requirements Read the standard Read the standard Read the standard rediffication, enter the name of the designated representative, sign & Standard Requirements General: This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(ii)). These requirements are listed in this source's Acid Rain Permit. Special Provisions for Early Election Units Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO, as provided under 40 CFR 76.8(e)(2) except as provided under 40 CFR 76.8(e)(3)(iii). Liability: The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR 76.8 at that unit. The owners and operators while the palicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election thase effect and ending December 31, 2007, the permitting suthority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative may submit an environment of the unit under an approved early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO, for Phase II units with Group 1 bely year for which the termination is to take effect. If an early election plan is terminated any year	(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA demonstration period ongoing	or 🗆			. 🗆	. 🗆				
Read the standard requirements and certification, enter the name of the designated representative, sign & General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(ii). These requirements are listed in this source's Acid Rain Permit. Special Provisions for Early Election Units Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO, as provided under 40 CFR 76.8(e)(2) except as provided under 40 CFR 76.8(e)(3)(iii). Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77. Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan falls to demonstrate compliance, with the designated representative may not submit a new early election plan. The demonstrate compliance, and the designated representative may not submit a new early election plan. In order to terminate the plan any year prior to 2000 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a network election plan. In order to terminate the plan, the designated representative must submit a network election plan. In order to terminate the plan, the designated representative must submit a network election plan is terminated only early planuary 1, 2000, the unit shall meet, beginning on the Leginning on the Election plan is terminated on or after 2000, the unit shall meet, beginning on the Leginning on the Leginning on the Elec	(p) Repowering extension plan approved or under review									
	requirements and certification, enter the name of the designated	General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(ii). These requirements are listed in this source's Acid Rain Permit. Special Provisions for Early Election Units Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO, as provided under 40 CFR 76.8(e)(2) except as provided under 40 CFR 76.8(e)(3)(iii). Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77. Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan falis to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative may plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet beginning January 1, 2000, the applicable emissions limitation for NO, for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is term								

EPA Form 7610-28 (3-97)